



# **Recruitment and Retention of Teachers in Missouri Public Schools**

---

**A Report to the Missouri General Assembly**

**December 2022**

**2022 UPDATE**

**RECRUITMENT AND RETENTION OF TEACHERS IN MISSOURI PUBLIC SCHOOLS  
A REPORT TO THE MISSOURI GENERAL ASSEMBLY**

**Introduction**

James Coleman, a Johns Hopkins's sociologist, issued the Equality of Educational Opportunity report over 50 years ago before educational research was common. It contained two key findings related to teacher quality:

- The “quality of teachers shows a stronger relationship than school facilities and curricula to pupil achievement.”
- The “effect of good teachers is greatest upon the children who suffer educational disadvantages most.”

Numerous researchers since then have come to the same conclusion: teacher quality is the most important school-related variable. The creation of this annual report on Missouri's teacher workforce acknowledges the critical role teachers have in student success.

To create this report, several key areas of data were analyzed including:

- teacher education program enrollment and certification data;
- teacher demographic data;
- age and experience of teachers; and
- teacher recruitment and teacher retention data.

**Summary of key teacher workforce demographic data for 2021-22**

Note: Irregularities in the trajectory of the data beginning in 2020-21 could be due to the impacts of the pandemic on the educator preparation program (EPP) enrollment and teacher workforce, as well as data reporting by EPPs and public school districts.

**Race/Ethnicity**

- The total number of Missouri teachers increased by 1.1 percent from 70,832 in 2020-21 to 71,713 in 2021-22.
- The percentage of Missouri teachers who are non-white increased from 6.9 percent in 2020-21 to 7.1 percent in 2021-22.

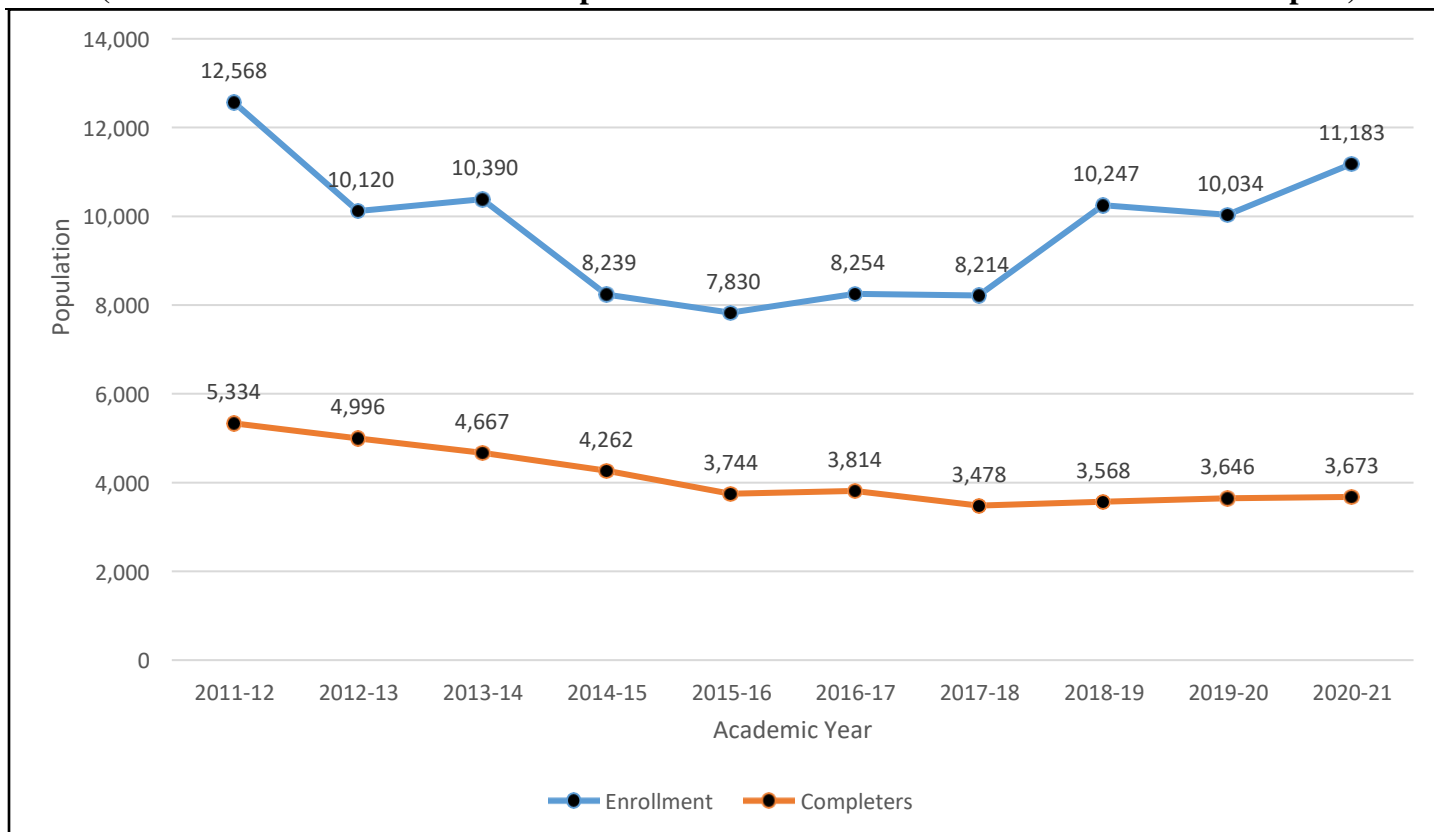
**Experience**

- Missouri teachers with 10 or fewer years of experience represented 47.4 percent of all teachers.
- Missouri teachers with five or fewer years of experience represented 26.2 percent of all teachers.

**Teacher Workforce Dynamics**

- In 2021-22, the percentage of Missouri teachers with three or more years of teaching experience was 51.9 percent.
- In 2021-22, the percentage of Missouri teachers with five or more years of teaching experience was 38.2 percent.
- The district hiring rate increased from 9.9 percent in 2020-21 to 11.9 percent in 2021-22.
- The percentage of district new hires who are first-year Missouri teachers increased from 53.8 percent in 2020-21 to 54.6 percent in 2021-22.

**Enrollment & Completers in EPPs from 2011-12 to 2020-21**  
**(Information from State Title II Report & Data from the State Annual Performance Report)**

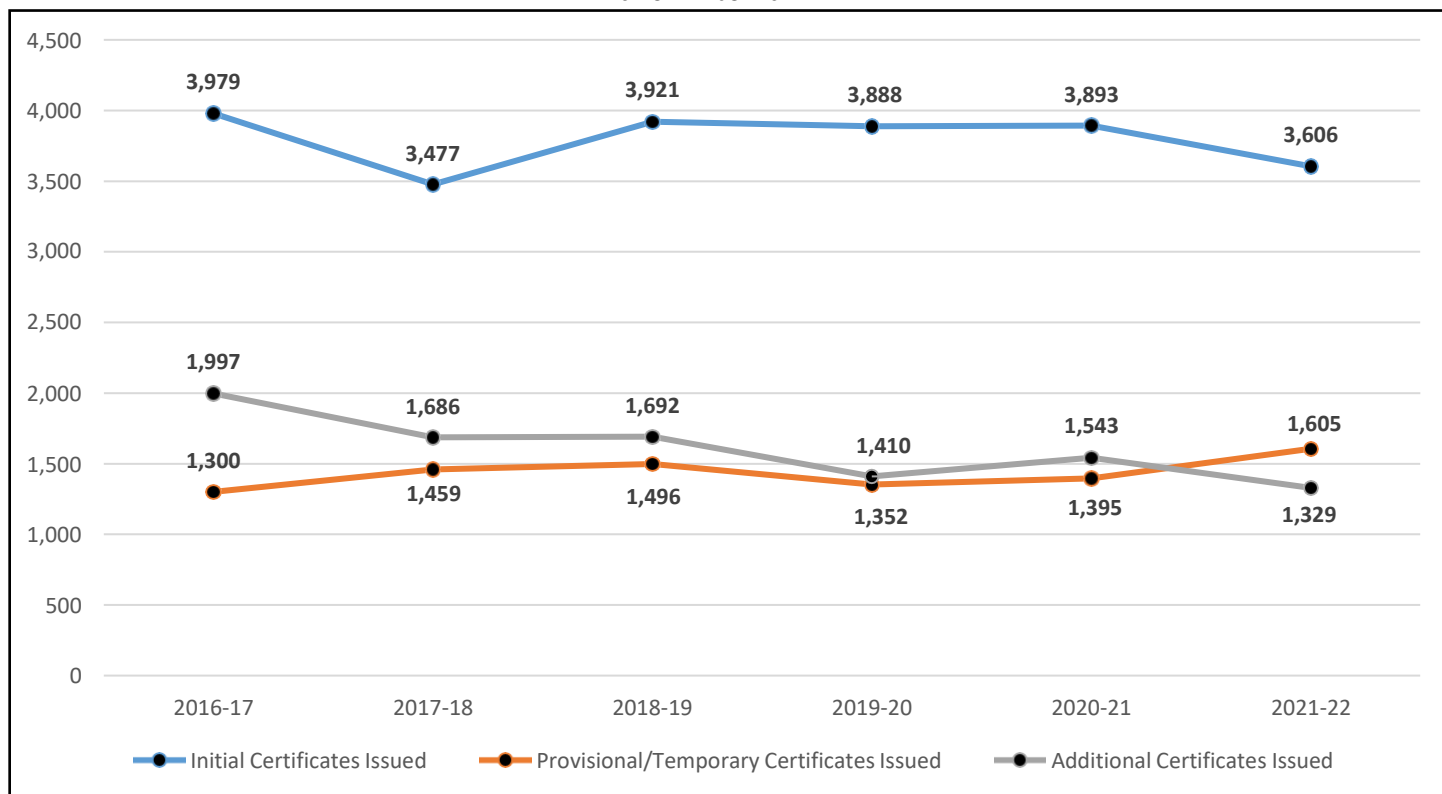


**EPP Enrollment from 2011-12 to 2020-21<sup>1</sup>**

School Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
<b>Enrollment</b>	12,568	10,120	10,390	8,239	7,830	8,254	8,214	10,247	10,034	11,183
<b>Completers</b>	5,334	4,996	4,667	4,262	3,744	3,814	3,478	3,568	3,646	3,673

<sup>1</sup> Information for this chart is a combination of the Missouri State Title II Report and data submitted for the Missouri Annual Performance Report for EPPs.

### Teacher Certificates Issued from 2016-17 to 2021-22

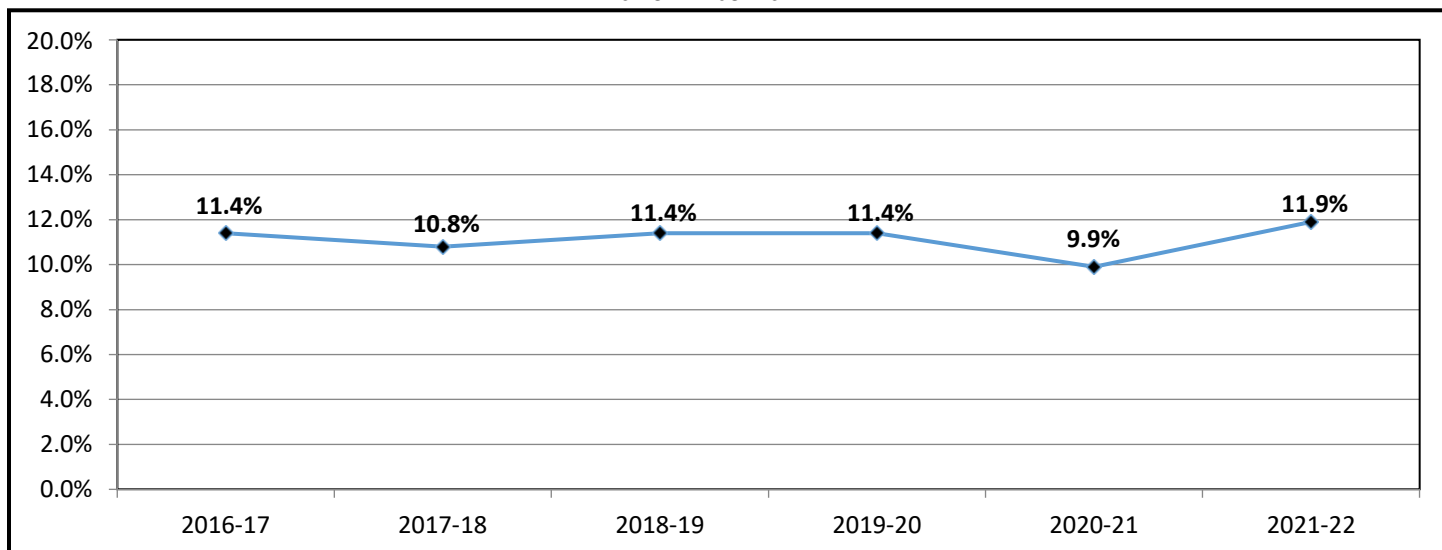


#### Teachers Certificates Issued from 2016-17 to 2021-22<sup>2</sup>

School Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
<b>Initial Certificates Issued</b>	3,979	3,477	3,921	3,888	3,893	3,606
<b>Provisional/Temporary Certificates Issued</b>	1,300	1,459	1,496	1,352	1,395	1,605
<b>Additional Certificates Issued</b>	1,997	1,686	1,692	1,410	1,543	1,329

<sup>2</sup> Information for this chart is from Missouri Educator Certification.

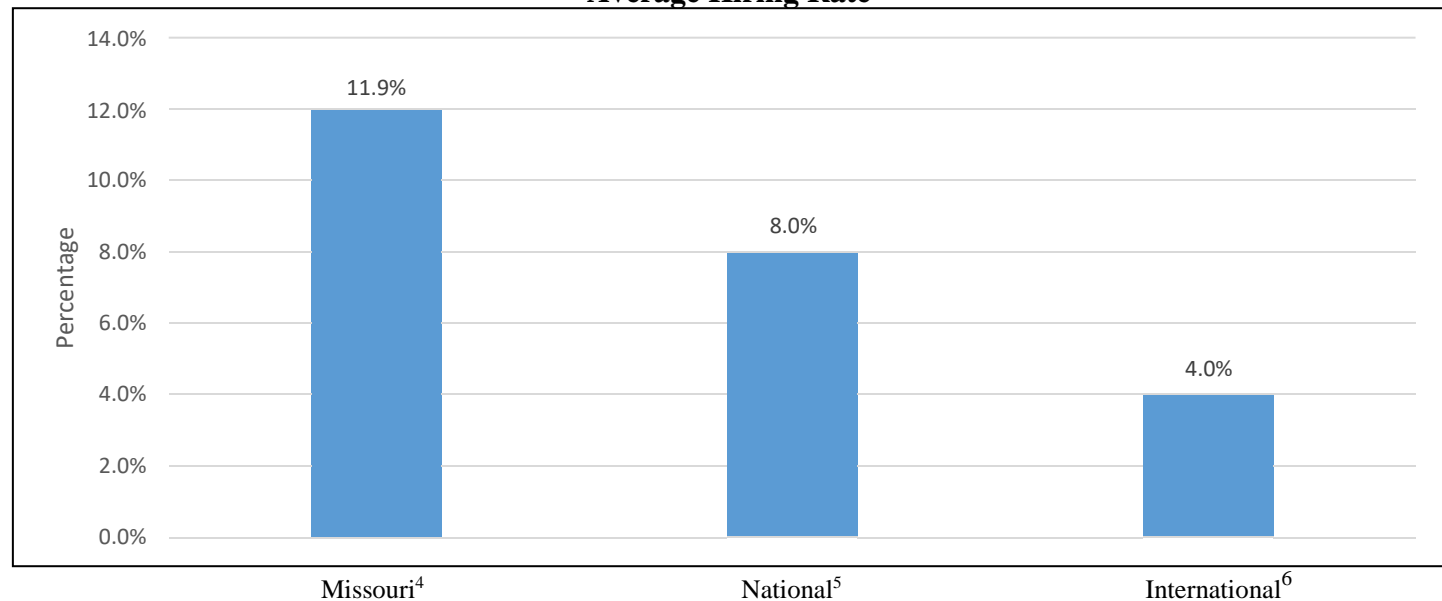
### Teacher Hiring Rates<sup>3</sup> from 2016-17 to 2021-22



### Hiring & Retention Rates from 2016-17 to 2021-22

School Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Total Teachers	70,244	70,618	70,816	71,170	70,832	71,713
District New Hires	8,024	7,649	8,061	8,091	7,031	8,547
Teacher Hiring Rate	11.4%	10.8%	11.4%	11.4%	9.9%	11.9%
Overall Teacher Retention Rate	88.6%	89.2%	88.6%	88.6%	90.1%	88.1%

### Average Hiring Rate



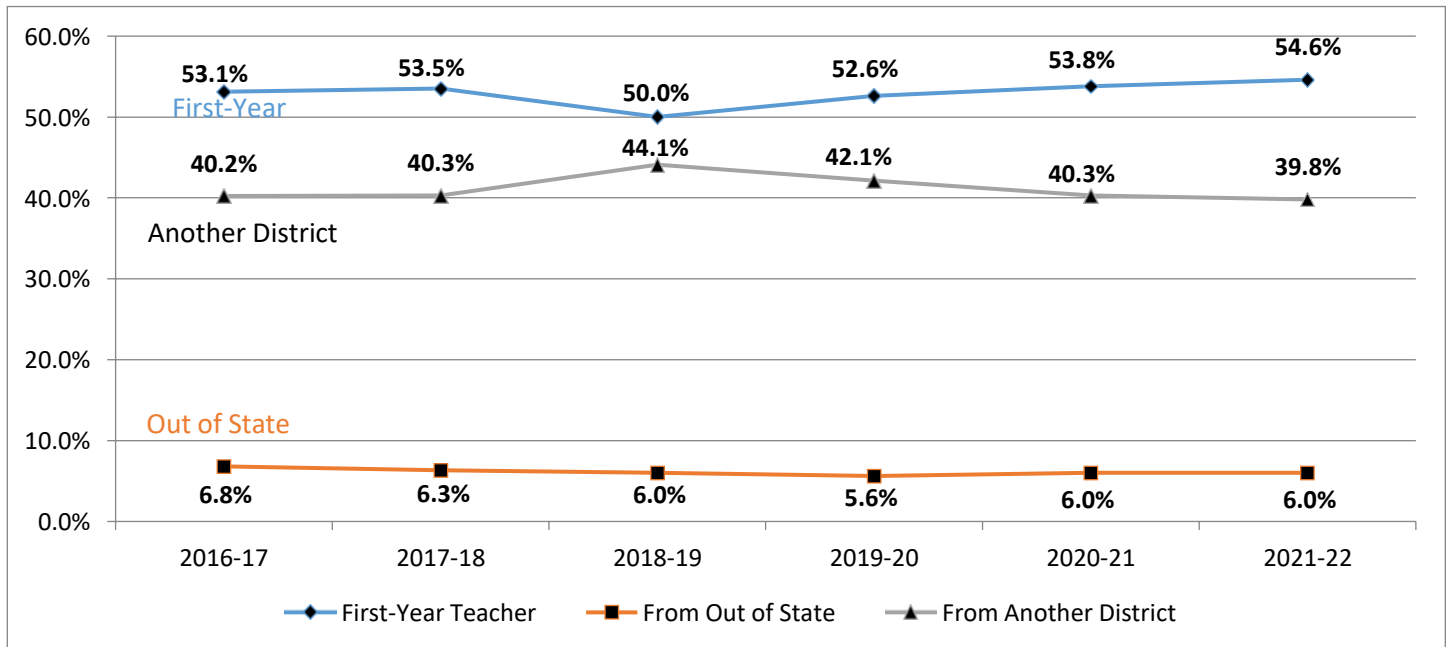
<sup>3</sup> Refers to filling any educator position regardless of the reason the position became vacant.

<sup>4</sup> Missouri average hiring rate over the past six years based on the Recruitment and Retention Report, 2021.

<sup>5</sup> National data based on the report from University of Massachusetts Global, July 2020.

<sup>6</sup> International data based on high performing countries (i.e. Singapore, Finland, & Ontario, Canada) from the University of Massachusetts Global, July 2020.

### District New Hires from 2016-17 to 2021-22

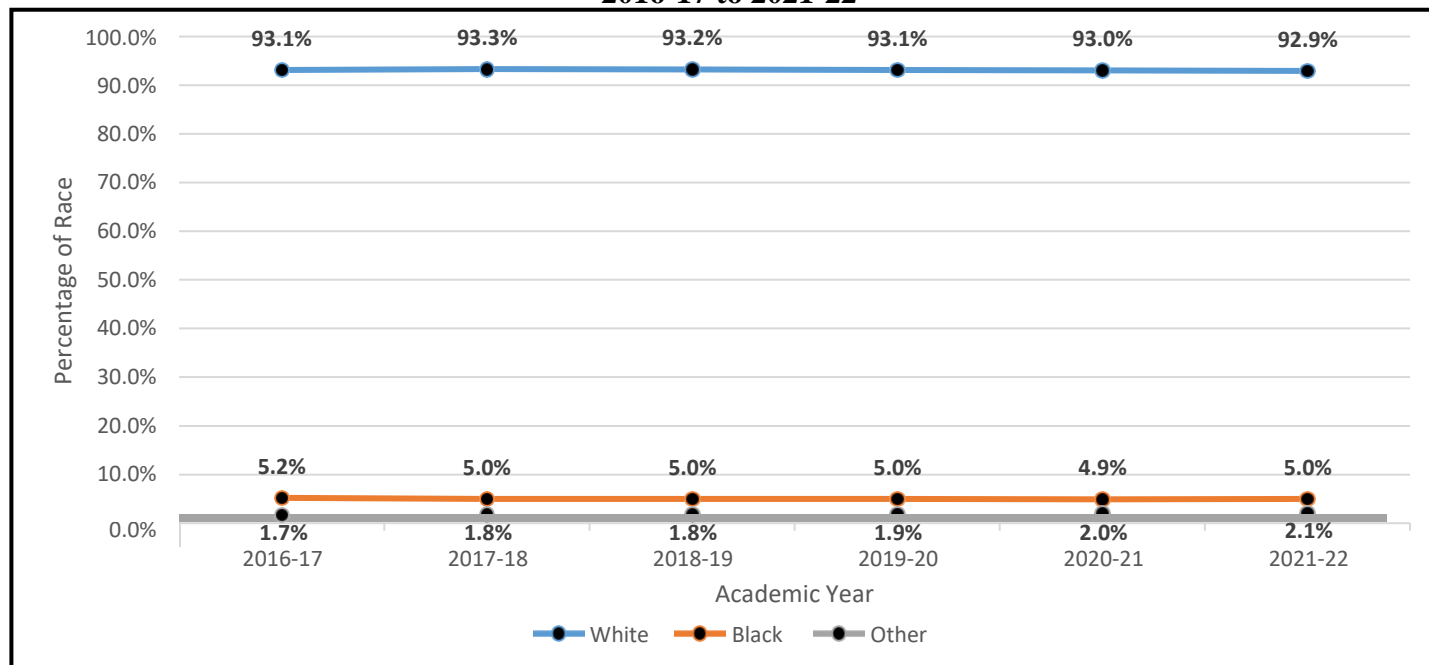


#### District New Hires from 2016-17 to 2021-22<sup>7</sup>

School Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Total New Hires	8,024	7,649	8,061	8,091	7,031	8,547
First-Year Teachers	53.1%	53.5%	50.0%	52.6%	53.8%	54.6%
From Another District	40.2%	40.3%	44.1%	42.1%	40.3%	39.8%
From Out of State	6.8%	6.3%	6.0%	5.6%	6.0%	6.0%

<sup>7</sup> The information in this chart comes from the October Cycle of the MOSIS/Core Data System.

### Race/Ethnicity Trends from 2016-17 to 2021-22

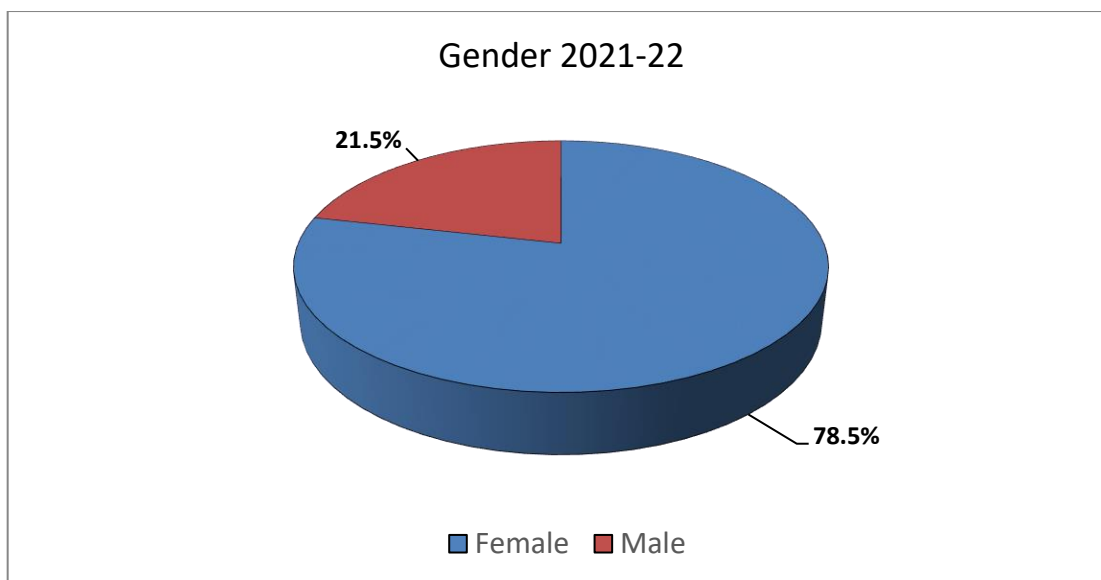


### Gender and Race/Ethnicity Trends from 2015-16 to 2020-2<sup>8</sup>

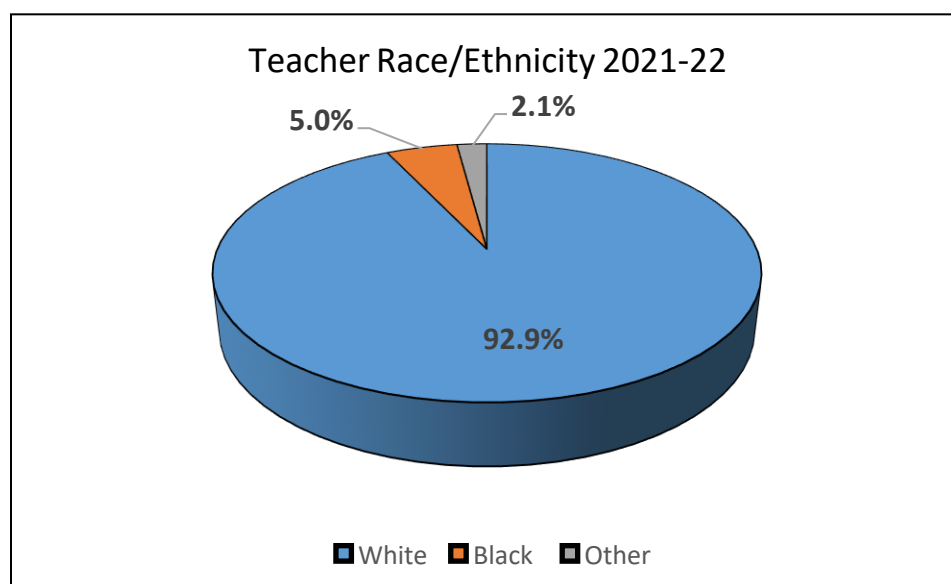
School Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
<b>Total Teachers</b>	70,244	70,618	70,816	71,170	70,832	71,713
<b>GENDER</b>						
<b>Female</b>	78.4%	78.5%	78.6%	78.5%	78.5%	78.5%
<b>Male</b>	21.6%	21.5%	21.4%	21.5%	21.5%	21.5%
<b>RACE/ETHNICITY</b>						
<b>White</b>	93.1%	93.3%	93.2%	93.1%	93.0%	92.9%
<b>Black</b>	5.2%	5.0%	5.0%	5.0%	4.9%	5.0%
<b>Other<sup>9</sup></b>	1.7%	1.8%	1.8%	1.9%	2.0%	2.1%

<sup>8</sup> The information in this chart comes from the October Cycle of the MOSIS/Core Data System.

<sup>9</sup> Refers to all non-white, non-black race/ethnicities.



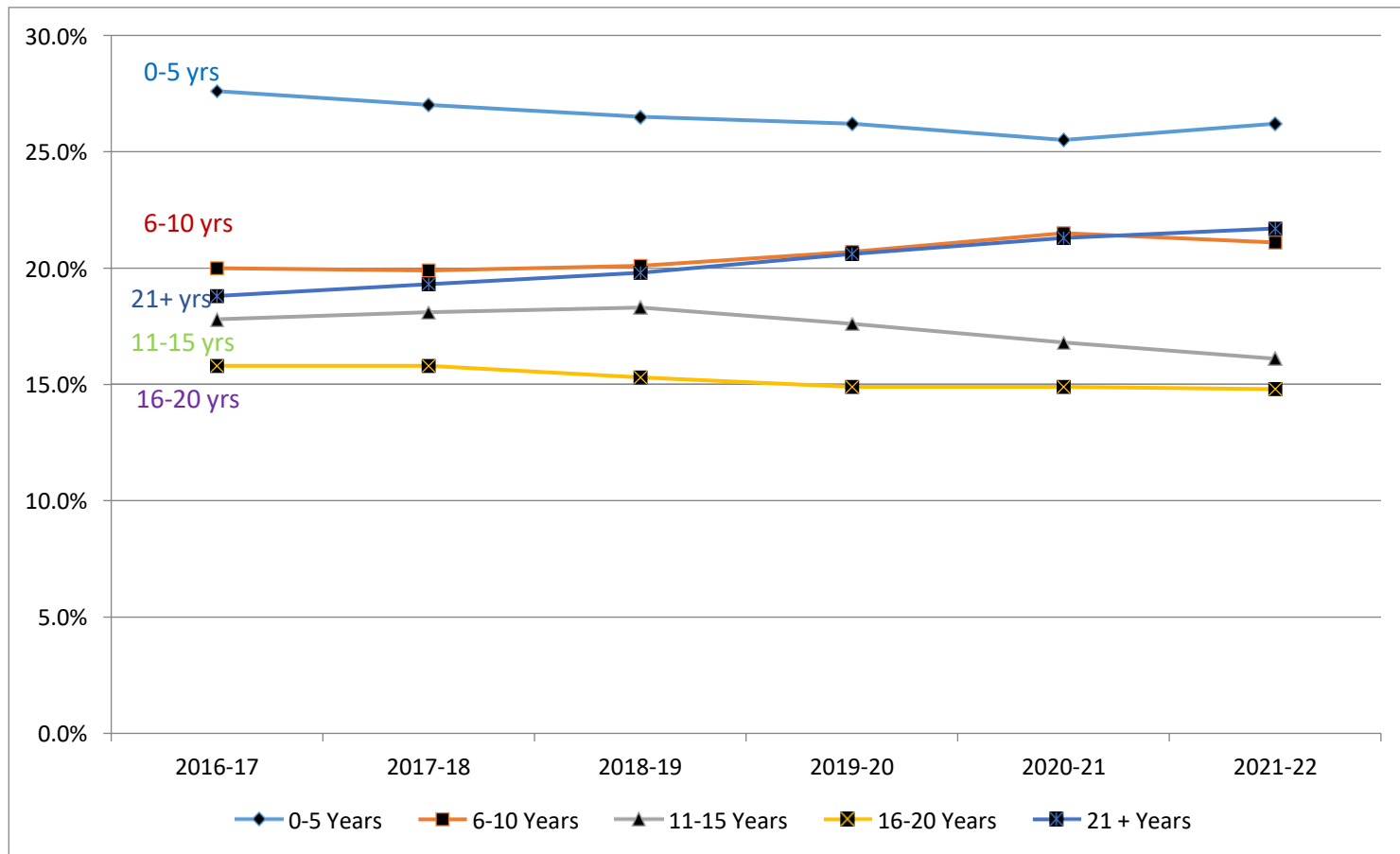
<b>School Year</b>	<b>2021-22</b>
<b>Total Teachers</b>	71,713
<b>GENDER</b>	
<b>Female</b>	78.5%
<b>Male</b>	21.5%
<b>RACE/ETHNICITY</b>	
<b>White</b>	92.9%
<b>Black</b>	5.0%
<b>Other<sup>10</sup></b>	2.1%



<sup>10</sup> Refers to all non-white, non-black race/ethnicities.



### Teacher's Years of Experience from 2016-17 to 2021-22



### Years of Experience from 2016-17 to 2021-22<sup>11</sup>

YEARS OF EXPERIENCE	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
<b>0-5</b>	27.6%	27.0%	26.5%	26.2%	25.5%	26.2%
<b>6-10</b>	20.0%	19.9%	20.1%	20.7%	21.5%	21.1%
<b>11-15</b>	17.8%	18.1%	18.3%	17.6%	16.8%	16.1%
<b>16-20</b>	15.8%	15.8%	15.3%	14.9%	14.9%	14.8%
<b>21+</b>	18.8%	19.3%	19.8%	20.6%	21.3%	21.7%

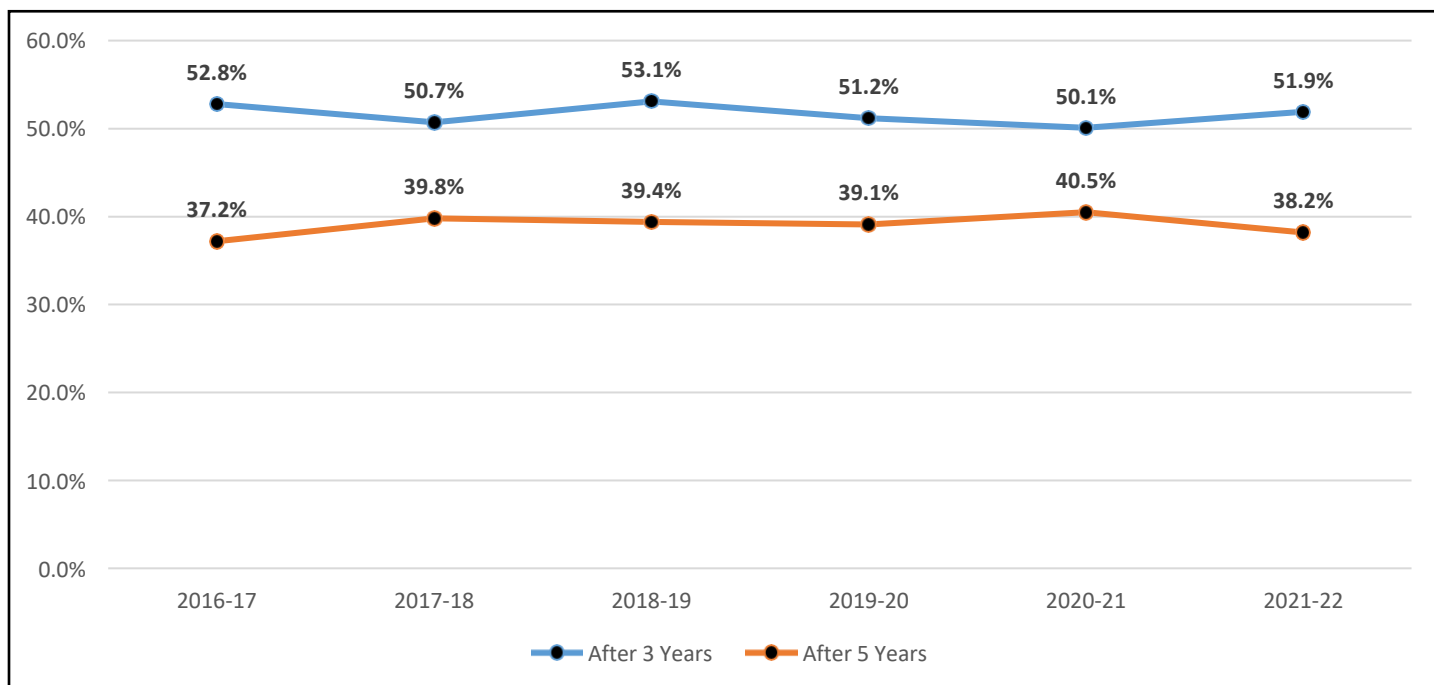
### Average Age of Teachers from 2016-17 to 2021-22<sup>12</sup>

AGE GROUP	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
<b>20-29</b>	15.9%	15.7%	15.4%	15.0%	14.9%	15.1%
<b>30-39</b>	30.6%	30.4%	30.2%	30.1%	29.6%	28.9%
<b>40-49</b>	28.5%	28.8%	29.2%	29.2%	29.6%	29.9%
<b>50-59</b>	18.5%	18.7%	18.9%	19.5%	20.0%	20.2%
<b>60 +</b>	6.6%	6.4%	6.3%	6.1%	5.9%	5.8%

<sup>11</sup> Information in this chart comes from the October Cycle of the MOSIS/Core Data System.

<sup>12</sup> Information in this chart comes from Educator Certification.

### First-Year Teacher Retention in Missouri's Public School Workforce from 2016-17 to 2021-22



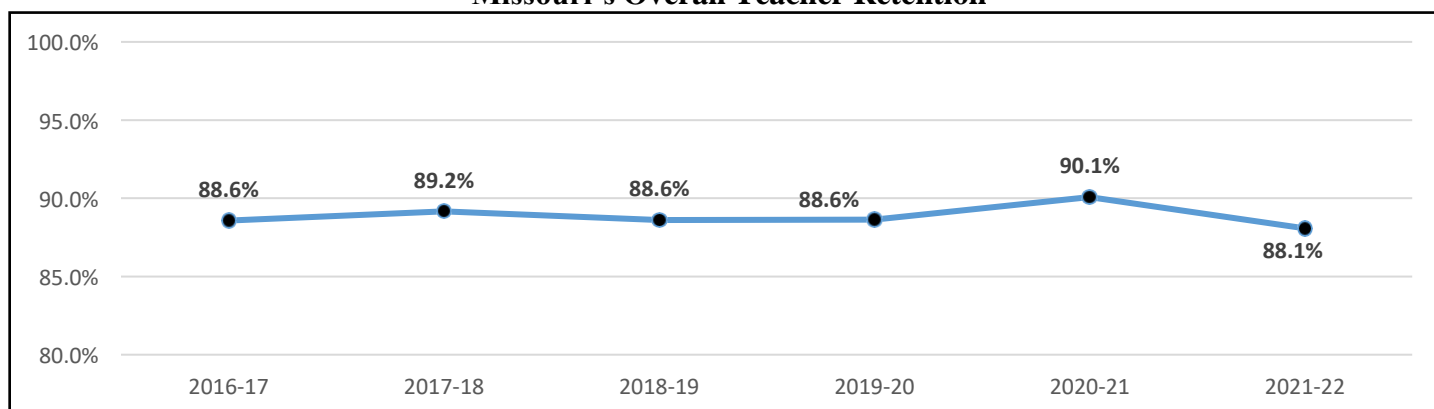
#### Missouri's First-Year Teacher Retention from 2016-17 to 2021-22

School Year	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
After 3 Years <sup>13</sup>	52.8%	50.7%	53.1%	51.2%	50.1%	51.9%
After 5 Years <sup>14</sup>	37.2%	39.8%	39.4%	39.1%	40.5%	38.2%

#### Missouri's Teacher Retention Rates from 2016-17 to 2021-22

Total Teachers	70,244	70,618	70,816	71,170	70,832	71,713
District New Hires	8,024	7,649	8,061	8,091	7,031	8,547

#### Missouri's Overall Teacher Retention



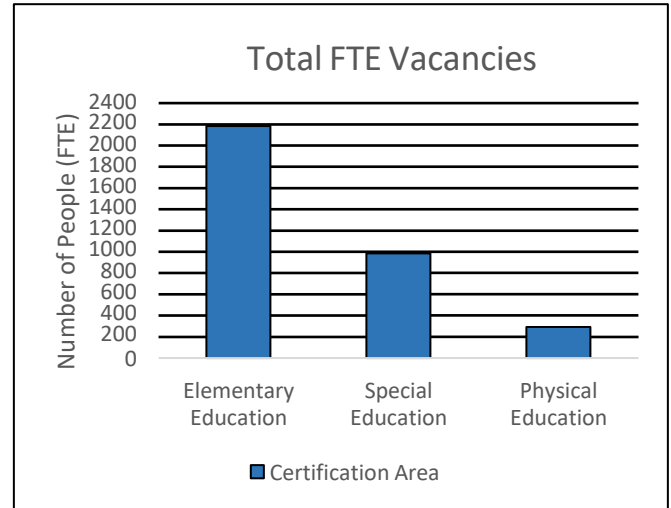
<sup>13</sup> Refers to Missouri teachers with three or more years of teaching experience and comes from the October Cycle of the MOSIS/Core Data System.

<sup>14</sup> Refers to Missouri teachers with five or more years of teaching experience and comes from the October Cycle of the MOSIS/Core Data System.

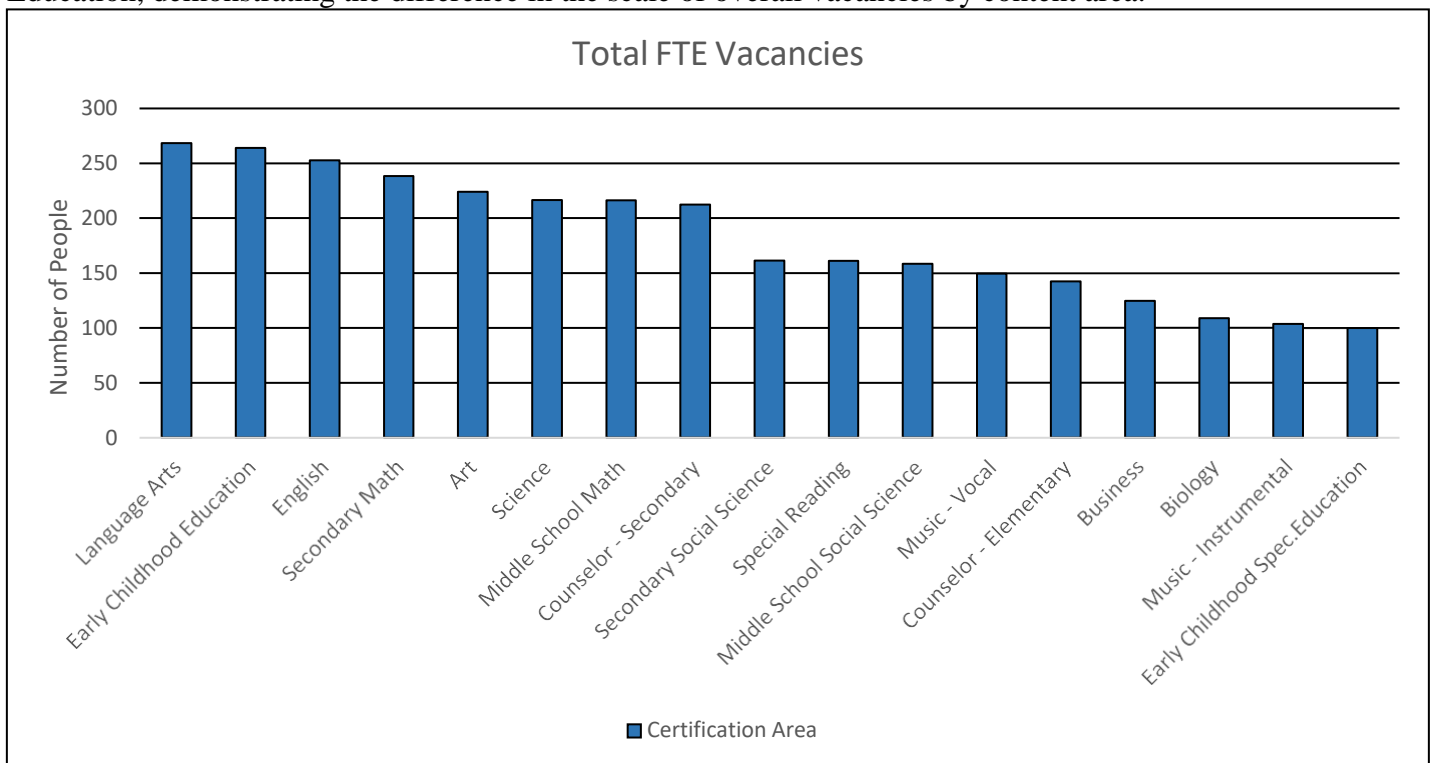
## Educator Vacancy Data

This data is gathered through the Educator Vacancy page (Screen 21) of the October Cycle of the MOSIS/Core Data System. Districts who responded and completed this page employed over 57,700 teachers in the state, and serve over 732,000 Missouri students.

This graph shows the number of vacancies statewide for the three certification areas with the highest numbers of full-time equivalent (FTE) vacancies in the state. There were 2,184.0 vacancies in Elementary Education, 983.5 vacancies in Special Education, and 291.1 vacancies in Physical Education.



The following graph shows the number of FTE vacancies statewide for the next 17 certification areas with the highest numbers of vacancies in the state in order from greatest to least. The scale on this graph goes from 0-300, compared to a scale of 0-2,400 on the graph for Elementary Education, Special Education, and Physical Education, demonstrating the difference in the scale of overall vacancies by content area.



## Teacher Shortage Data

The U.S. Department of Education has approved the content areas listed in the 2022-23 Teacher Shortage Report as areas of critical shortage for the State of Missouri. Based on this designation, teachers that are teaching within shortage areas identified by this report are eligible for loan forgiveness. Federal loans that qualify under this designation include the Federal Family Education Loan (FFEL), Federal Perkins Loan, Teacher Education Assistance for College and Higher Education (TEACH) Grant Program, Stafford Loan, and Supplemental Loans for Students (SLS).

## Method

The Missouri Department of Elementary and Secondary Education uses appropriate certification of teachers to identify the designated areas of critical shortage.

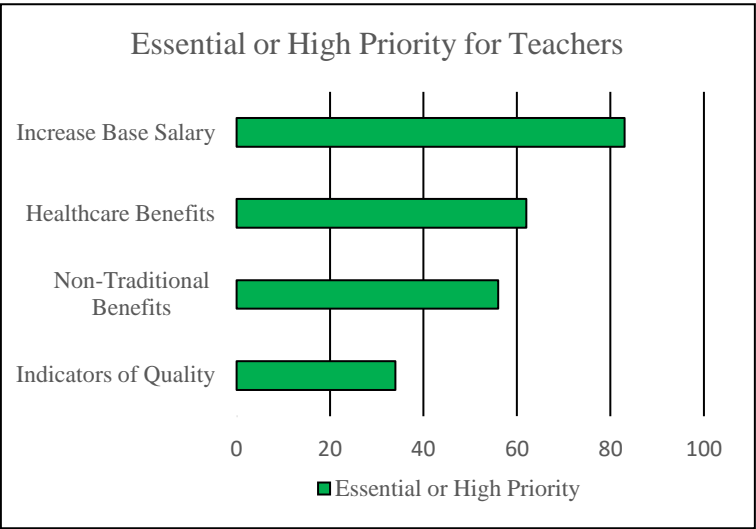
- Shortage areas were defined as those content areas within the state for which positions were filled with inappropriately certified teacher(s) or left vacant due to the absence of certified candidates.
- Inappropriately certified teachers and total FTE count for each content area were compiled.
- Inappropriately certified teachers by content area were determined by comparing the number of inappropriately certified FTE to the total FTE count for each content area.
- The percentage FTE shortage by content area was determined by calculating the percentage of inappropriately certified teachers per content area as compared to the total number of teachers in the state.
- A weighted value to represent the relative prominence of each content area was calculated as a percentage of the total FTE by content area as compared to the total number of teachers in the state.
- A weighted percentage of FTE shortage by content area was determined by multiplying the raw percentage FTE shortage by the weight of each content area.
- Consistent with the U.S. Department of Education Teacher Shortage Areas External User Guide, the sum of shortage areas was determined not to exceed 5 percent of the total number of FTE teaching positions within the state.

<b>Subject Area<sup>15</sup></b>	<b>FTE Inappropriately Certified<sup>16</sup></b>	<b>Shortage Indicator by Total FTE</b>
<b>ELEMENTARY EDUCATION 1-6</b>	<b>523.32</b>	<b>0.73%</b>
<b>MILD/MODERATE CROSS CATEGORICAL K-12</b>	<b>409.20</b>	<b>0.57%</b>
<b>EARLY CHILDHOOD SPECIAL EDUCATION B-3</b>	<b>391.10</b>	<b>0.55%</b>
<b>EARLY CHILDHOOD EDUCATION B-3</b>	<b>372.29</b>	<b>0.52%</b>
<b>SOCIAL SCIENCE 5-9</b>	<b>281.88</b>	<b>0.39%</b>
<b>PHYSICS 9-12</b>	<b>281.67</b>	<b>0.39%</b>
<b>MATHEMATICS 5-9</b>	<b>234.73</b>	<b>0.33%</b>
<b>SEVERE DEVELOPMENT DISABLE B-12</b>	<b>204.77</b>	<b>0.29%</b>
<b>BIOLOGY 9-12</b>	<b>199.07</b>	<b>0.28%</b>
<b>GENERAL SCIENCE 5-9</b>	<b>191.73</b>	<b>0.27%</b>

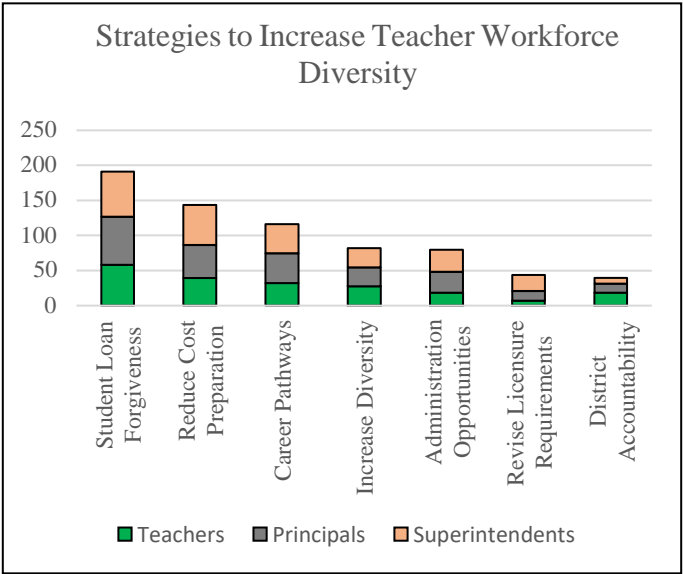
<sup>15</sup> Information comes from Educator Certification.

<sup>16</sup> Information in this chart comes from the October Cycle of the MOSIS/Core Data System.

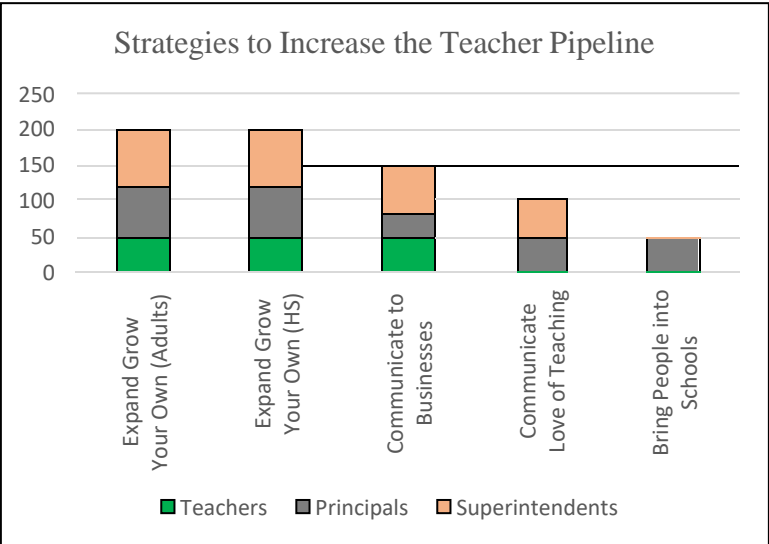
Challenges with Teacher Recruitment and Retention



Teacher compensation has consistently been a significant teacher recruitment challenge. The Blue Ribbon Commission, established by the State Board of Education in 2022, gathered data to inform recruitment and retention recommendations. In a survey of over 15,000 Missouri teachers, the Blue Ribbon Commission asked what areas of compensation would be the most important. Responses to these surveys showed that teachers thought it was essential or a high priority to include base salary as a part of compensation followed by health benefits and less agreement that additional compensation be connected to quality indicators such as National Board Certification.



Additional Blue Ribbon Commission surveys asked teachers (shown along the bottom in green), principals (shown in the middle in grey), and superintendents (shown along the top in orange) what strategies they felt would work for increasing the diversity of the workforce. The size of the bar reflects the cumulative percentages of teachers, principals, and superintendents. All three groups of educators offered similar feedback. Collectively they felt student loan forgiveness, reducing the cost of preparation, creating additional career pathways, and increasing the diversity of the pipeline would be most effective. There was much less support for revising licensure or holding districts accountable for increasing the diversity of their staff.



All three groups of educators were also asked what teacher recruitment strategies would work best for increasing the teacher pipeline and creating more new teachers. All three groups were similar in their thinking that Grow Your Own programs for either adults like paraprofessionals or substitute teachers and Grow Your Own programs for high school students would be the most effective. They also felt that more communication about the teaching profession to businesses would be somewhat effective as well. Least effective would be bringing people into schools more often.

## Financial Aid for Students Preparing To Be Teachers

The U.S. Department of Education has approved the content areas listed in the 2022-23 Teacher Shortage Report as areas of critical shortage for the State of Missouri. Based on this designation, teachers that are teaching within shortage areas identified by this report are eligible for loan forgiveness. Federal loans that qualify under this designation include the Federal Family Education Loan (FFEL), Federal Perkins Loan, TEACH Grant Program, Stafford Loan, and Supplemental Loans for Students (SLS). For more information please visit

### **U.S. Department of Education – Teacher Shortage**

Loan Forgiveness-For questions concerning Federal Stafford/SLS loans, including the teacher shortage area deferment, contact the Federal Student Aid Hotline at 800-433-3243. More information may be found at the [Federal Student Aid](#) site.

## **TEACH Missouri**

TEACH Missouri is a statewide initiative committed to improving the perception of the teaching profession and developing a statewide teacher recruitment and retention system to attract the next generation of Missouri teachers and retain the current teaching workforce. The initiative is being led by the Missouri Department of Elementary and Secondary Education in collaboration with education institutions, government agencies, associations, community organizations, and nonprofit stakeholders.

All Missouri EPPs, community colleges, local education agencies, and mission-aligned organizations have been invited to join this collaborative effort to recruit the next generation of teachers and retain the current teacher workforce. Together, this coalition will recruit the next generation of teachers, especially in subject shortage areas, and help to ensure that the teacher workforce matches the racial, ethnic, and linguistic diversity of Missouri students. TEACH Missouri includes the following, all aimed at identifying, cultivating, and supporting new teachers:

- **Teacher Education Recruitment and Retention Grants:** Federal funds are available for every EPP, community college, and school district in the state to further invest in teacher recruitment, preparation, support, and retention. The funds also support innovative new programs, including Grow Your Own initiatives to help school districts support their own students and staff to become teachers.
- **Pathways to Teaching Careers:** A new teacher “externship” program provides regional training sessions for teachers to become recruiters within their own school communities, mobilizing them as ambassadors for the profession.
- **A partnership with a national education nonprofit, TEACH ([TeachMO.org](https://teachmo.org))** which includes:
  - **Digital Teacher Recruitment Platform** which serves as a centralized hub for prospective teachers to explore the profession, access free and comprehensive resources, and receive support in applying to EPPs throughout the state.
  - **Statewide Marketing** which includes TV and radio ads, as well as various digital marketing campaigns, to elevate the perception of the teaching profession and generate interest among future teacher.